AMENDMENT TO CLAIMS: Basis for the amendment to claim 1 can be found in claim 12. Entry of this amendment makes all claims consistent, involves no new search and, it is submitted, would simplify the issues should an appeal be necessary.

DOUBLE PATENTING: The Applicants acknowledge the provisional double patenting rejection but would like to hold off a formal response to that rejection until there is a determination of the final status of claims in this Application and co-pending CIP Application Serial No. 08/145,060.

THE INVENTION

The invention is a composition comprising human monoclonal antibodies that bind specifically to a human cytokine known as tumor necrosis factor alpha (TNFα). The Examiner has acknowledged that all claims appear free of the prior art.

UTILITY UNDER 35 USC 101: The Applicants maintain their earlier position that they have already satisfied 35 USC 101 utility in the specification as filed. Throughout their Application, the Applicants have stated and demonstrated utility by showing that their human monoclonal antibodies bind specifically to TNFα. Those statements and the supporting data are definite statements of utility and fully satisfy the requirements under 35 USC 101.

Contrary to the Examiner's assertion, the present claims are unlike those in the decision In re Kirk, et al., 153 USPQ 49 at 52 (CCPA 1967). In the Kirk, et al. decision, the Applicants attempted to rely on the relationship of the claimed steroids to previously known steroids and that reliance was held not persuasive to

overcome a 101 utility rejection. It should be noted that in a vigorous and separately written dissent by Judge G. Rich, 153 USPQ 266 at page 273, the requirement of mentioning a specific use was applicable (only) "...at least in the absence of evidence that a specific use would be obvious." (underlining added). That dissent rationale is analogous to the present situation. It is well known to those skilled in the art of monoclonal antibodies that any monoclonal antibody can be used to bind to a given substance. These uses may have many forms such as diagnostic uses, purification, therapeutic uses, etc.

The Examiner appears to have taken the position that under both 35 USC 101 and 112, first paragraph, the Applicants are required to teach how to use the claimed invention and have not done so. It is the Applicants' position that they have done this in their specification as filed. In further support of this position, the Applicants are enclosing a Declaration under 37 CFR 1.132 by Professor Matthias Wabl, a person skilled in the art, pointing out that specific uses of the human anti-TNFα antibodies would be obvious. See especially the attached Abstract by J. Wherry, et al. presented at the 3rd ICAAC, October 17-20, 1993 showing a trend toward efficacy in using murine anti-TNF to treat such patients. A fortiori, a human anti-TNF would be expected to have at least a similar trend and, being human, more desirable to avoid potential immunogenicity problems. See also the copies of the news article describing clinical studies of anti-TNF and catalogs showing that anti-TNF antibodies are commercially available. It is submitted that commercial availability is per se evidence of utility of a given monoclonal antibody. Since anti-TNF monoclonals are in fact commercially available, it is submitted such antibodies are inherently useful.

VERIFICATION OF CHAIN OF CUSTODY: The Declaration from co-inventor G. Wetzel supports chain of custody of the deposited cell lines.

SCOPE OF CLAIMS, ENABLEMENT: In response to the Examiner's statement that the Applicants have not provided criteria that would be significant for identifying potential lymphocyte donors having anti-TNF human antibodies, the Applicants are submitting a second Declaration under 37 CFR 1.132 by co-inventor G. Wetzel. One skilled in the art would have no trouble duplicating the antibodies of their claims, given reasonable time and resources and that no undue experimentation would be required. See also part 2 of the enclosed Declaration of Dr. Matthias Wabl.

It is clear from the enclosed Declarations that one of ordinary skill in the art could readily obtain the peripheral blood lymphocytes necessary for human hybridoma production. A standard screening process is then used to identify those cells testing positive for human anti-TNFα antibodies that bind specifically to TNFα. Given the teaching of the disclosure as filed, the Applicants clearly have enabled their invention and it is respectfully submitted that the rejection on this ground should be withdrawn.

PRIOR ART: The Examiner has acknowledged that claims 1 - 14 appear free of the prior art in that the prior art does not disclose the production of human monoclonal antibodies to human TNFα. It should be noted that the present claims additionally require that such antibodies specifically bind to TNFα. Further evidence of the patentability of the claimed subject matter is the Applicants' own publications referred to by the Examiner.

In view of the above amendments and in the enclosed Declarations, it is respectfully submitted that the claims in this Application define patentable subject matter and should be allowed. In any case, the requested amendments should be entered if for no other reason than to simplify issues on Appeal. Specifically, the deletion of the new matter would make that a non-issue on Appeal. Any addition to the amendment to claim 1 would make it consistent with the remaining product claims thereby simplifying the issues to be considered by the Board of Appeals.

Respectfully submitted,

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